UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

P O Box 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

# NOTICE OF ALLOWANCE AND FEE(S) DUE

7590 12/30/2008

Yukiko Iwata Shell Oil Company Intellectual Property PO Box 2463 Houston, TX 77252-2463 EXAMINER

CAMPANELL, FRANCIS C

ART UNIT PAPER NUMBER

1797 DATE MAILED: 12/30/2008

 APPLICATION NO.
 FILING DATE
 FIRST NAMED INVENTOR
 ATTORNITY DOCKET NO.
 CONFIRMATION NO.

 10/511,337
 10/15/2004
 Frank David Wayne
 TS9280 US
 2 1/9

TITLE OF INVENTION: METHOD OF CONTROLLING LUBRICANT PROPERTIES BY MEANS OF DILUTING THE SAME

 APPLN. TYPE
 SMALL ENTITY
 ISSUE FEE DUE
 PUBLICATION FEE DUE
 PREV. PAID ISSUE FEE
 TOTAL FEE(s) DUE
 DATE DUE

 nonprovisional
 NO
 \$1510
 \$300
 \$0
 \$1810
 03/30/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION NO THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and I/2 the ISSUE FFE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

# Complete and send this form, together with applicable fee(s), to: Mail Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

appropriate. All further indicated unless corrects maintenance fee notifica	correspondence includir ed below or directed oth	or trans ig the P ierwise	atent, advance of in Block 1, by (a	ders and notification of specifying a new corn	maintenance fees verspondence address	will be ; and/o	mailed to the current r (b) indicating a sepa	correspondence address as trate "FEE ADDRESS" for	
CURRENT CORRESPOND	ny change of address)	No Fe pa ha	Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.						
Yukiko Iwata Shell Oil Compa Intellectual Prop		/2008			Ces	ctificat	e of Mailing or Trans		
PO Box 2463 Houston, TX 77	252-2463							(Depositor's name)	
, , , , , , , , , , , , , , , , , , , ,				L				(Signature)	
				L				(Date)	
APPLICATION NO.	FILING DATE			FIRST NAMED INVENTO	R	ATTO	ORNEY DOCKET NO.	CONFIRMATION NO.	
10/511,337 TITLE OF INVENTION	10/15/2004 E: METHOD OF CONTR	OLLIN	G LUBRICANT	Frank David Wayne PROPERTIES BY MEA	NS OF DILUTING	THE S	TS9280 US AME	2169	
APPLN. TYPE	SMALL ENTITY	ISS	UE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSU	E FEE	TOTAL FEE(8) DUE	DATE DUE	
nonprovisional	NO		\$1510	\$300	\$0	\$1810		03/30/2009	
EXAM	IINER		ART UNIT	CLASS-SUBCLASS	7				
CAMPANELL	, FRANCIS C		1797	508-579000	_				
"Fee Address" ind PTO/SB/47; Rev 03-0 Number is required.  3. ASSIGNEE NAME A	ondence address (or Cha 3/122) attached. ication (or "Fee Address 12 or more recent) attach ND RESIDENCE DATZ less an assignce is ident h in 37 CFR 3.II. Comp	nge of C 'Indica ed. Use	Correspondence tion form of a Customer		no 3 registered pater ively, gle firm (having as agent) and the nan orneys or agents. If e printed. ype) patent. If an assign assignment.	a memb nes of u no nan	per a 2pp to a 3	ocument has been filed for	
Please check the appropr	iate assignee category or	categor	ies (will not be pr	inted on the patent):	Individual C	orporat	ion or other private gro	oup entity Government	
Advance Order -	wo small entity discount p		d)	o. Payment of Fee(s): (Plo A check is enclosed. Payment by credit or The Director is herel overpayment, to Dep	ard. Form PTO-203	3 is atta	ached.	shown above) ficiency, or credit any n extra copy of this form).	
- 11	s SMALL ENTITY state	s. See 3	7 CFR 1.27.	☐ b. Applicant is no lo					
NOTE: The Issue Fee an interest as shown by the	d Publication Fee (if req records of the United Sta	iired) w tes Pate	ill not be accepted nt and Trademark	from anyone other than Office.	the applicant; a reg	istered	attorney or agent; or th	ne assignee or other party in	
Authorized Signature					Date				
Typed or printed name				Registration No.					
This collection of inform an application. Confiden submitting the complete this form and/or suggesti Box 1450, Alexandria, V Alexandria, Virginia 223	nation is required by 37 C tiality is governed by 35 d application form to the ions for reducing this but 'irginia 22313-1450. DC k13-1450.	FR 1.31 U.S.C. USPTO den, sh NOT S	1. The informatic 122 and 37 CFR D. Time will vary ould be sent to the SEND FEES OR	on is required to obtain or 1.14. This collection is e depending upon the indi- e Chief Information Offic COMPLETED FORMS	retain a benefit by stimated to take 12 ividual case. Any coer, U.S. Patent and TO THIS ADDRES	the pub minute ommen Trader S. SEN	lic which is to file (and s to complete, including ts on the amount of times ark Office, U.S. Dep D TO: Commissioner	by the USPTO to process) g gathering, preparing, and me you require to complete artment of Commerce, P.O. for Patents, P.O. Box 1450,	

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



Houston, TX 77252-2463

# UNITED STATES PATENT AND TRADEMARK OFFICE

#### UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

PO Box 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/511,337	10/15/2004	Frank David Wayne	TS9280 US	2169	
75	590 12/30/2008		EXAMINER		
Yukiko Iwata			CAMPANELL, FRANCIS C		
Shell Oil Company		ART UNIT	PAPER NUMBER		
Intellectual Proper	ty	1797			
PO Box 2463	0.0460	DATE MAILED: 12/30/2008			

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 749 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 749 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

## Application No. Applicant(s) 10/511.337 WAYNE, FRANK DAVID Notice of Allowability Examiner Art Unit FRANK C. CAMPANELL 1797 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. This communication is responsive to the amendment filed on 08/04/2008. The allowed claim(s) is/are 1,3-12,15 and 16. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). b) ☐ Some\* c) ☐ None of the: a) 🔯 All 1. A Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). \* Certified copies not received: \_\_\_\_\_. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. | Notice of References Cited (PTO-892) 5. Notice of Informal Patent Application 2. Notice of Draftperson's Patent Drawing Review (PTO-948) Interview Summary (PTO-413), Paper No./Mail Date Information Disclosure Statements (PTO/SB/08). 7. X Examiner's Amendment/Comment Paper No./Mail Date 10/30/2008 4. T Examiner's Comment Regarding Requirement for Deposit 8. X Examiner's Statement of Reasons for Allowance of Biological Material 9. ☐ Other .

Application/Control Number: 10/511,337 Page 2

Art Unit: 1797

## DETAILED ACTION

#### **EXAMINER'S AMENDMENT**

An examiner's amendment to the record appears below. Should the changes
and/or additions be unacceptable to applicant, an amendment may be filed as provided
by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be
submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Marcella Watkins on 12/18/2008.

The application has been amended as follows: Claims 13 and 14 are cancelled.

## Response to Arguments

- Applicant's arguments filed 08/04/2008 have been fully considered persuasive.
- 2. Examiner points out that the argument regarding the '244 patent not teach miscibility under all system operating conditions and the argument regarding reversibly diluting not being a well known and obvious variant at the time of the prior art (examiner refers to the NPL submitted by applicant entitled "In Search of the Perfect Hydraulic Fluid") as persuasive.

# Allowable Subject Matter

Claims 1, 2-12 and 15-16 are allowed.

Application/Control Number: 10/511,337 Page 3

Art Unit: 1797

4. Regarding claims 1, 2-12 and 15-16 a process for controlling the viscosity and another property chosen from the list of traction coefficient, compressibility, lubricating film thickness, and pressure response to velocity of a working fluid which comprises

- (i) providing a base fluid with optimal properties for "warm" (warm as defined by the specification) operating conditions
- 6. (ii) providing a diluent which is miscible under all working conditions
- 7. (iii) reversibly diluting the base fluid with the diluent
- 8. Could not be found in the prior art

Any inquiry concerning this communication or earlier communications from the examiner should be directed to FRANK C. CAMPANELL whose telephone number is (571)270-3165. The examiner can normally be reached on Mon-Fri 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Walter Griffin can be reached on 571-272-1447. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/511,337 Page 4

Art Unit: 1797

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

FCC

/Walter D. Griffin/ Supervisory Patent Examiner, Art Unit 1797